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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/519,800

12/29/2004

Yoshihiro Hieda

043162

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7590

04/19/2007

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EXAMINER

JOY, DAVID J

ART UNIT

PAPER NUMBER

1774

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/19/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/519,800

Applicant(s)

HIEDA ET AL.

Examiner

David J. Joy

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/29/04</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Election/Restrictions*

1. Examiner has agreed to examine the article and apparatus claims together.

However, if the apparatus claims are significantly amended away from the article claims, such that different inventions are recited, the claims may be subject to a restriction requirement.

### *Priority*

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Specification*

3. The disclosure is objected to because of the following informalities: The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

*Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim language recites the limitation "with separation of a predetermined distance." Appropriate correction is required.

*Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-10 and 13-15 rejected under 35 U.S.C. 102(b) as being anticipated by the International Publication of Nakanishi et al. (WO 02/091161; hereinafter "Nakanishi").

All citations will be made to the U.S. Patent of Nakanishi et al. (7,161,588), the U.S.

Patent equivalent of the WIPO document, for the purposes of the office action.

8. Nakanishi teaches a transparent laminate for a pen-input image display device, containing a surface-treated layer, a transparent rigid layer, and a transparent relaxing layer, which has a thickness from 0.2 to 2 mm, laminated together in that order (see Abstract; see also Figures 1-7; see also Column 1, Lines 9-14; see also Column 3, Line 35 – Column 4, Line 2; see also Column 5, Line 64 – Column 6, Line 8). Nakanishi also teaches that the transparent relaxing layer is an adhesive layer, with a thickness from 0.2 to 1.5 mm (see Column 5, Line 64 – Column 6, Line 8). Additionally, Nakanishi teaches that the transparent rigid layer has a thickness from 0.15 to 2 mm (see Column 23, Lines 35-45). With regard to the surface-treated layer, Nakanishi teaches that the layer can be an anti-reflection layer, an anti-mirroring layer or a hard coated layer (see Column 3, Line 66 – Column 4, Line 2). Further, Nakanishi teaches that the transparent laminate also has a pair of transparent, electrically-conductive layers, positioned between the surface-treated layer and the transparent rigid layer, so as to face each other (see Figures 1-7; see also Column 3, Lines 46-59; see also Claim 1).

9. Nakanishi also teaches a pen-input image display device with an image display panel, and a transparent laminate having a surface-treated layer, a transparent rigid layer, and a transparent relaxing layer, which has a thickness from 0.2 to 2 mm, laminated onto a image display panel, so that the transparent relaxing layer is placed inward (see Figures 6 and 7; see also Column 1, Lines 9-14; see also Column 9, Line 41 – Column 10, Line 11). Further, Nakanishi teaches that the pen-input image display sinks inward to a depth of 20 to 100  $\mu\text{m}$ , when exposed to a load exerting contact to the surface of the display, but the display is restored to its original state when the load is removed (see Column 6, Lines 40-47).

10. Nakanishi does not teach that the transparent rigid layer and the transparent relaxing layer possess the particular dynamic storage modulus values, as claimed. However, given that the structure of the laminate taught by Nakanishi matches that which is claimed in the instant application, these limitations are deemed to have been inherently anticipated. The claiming of a new use, new function or unknown property, which is inherently present in the prior art, does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). Mere recitation of a newly-discovered function or property, inherently possessed by things in prior art, does not cause claim language drawn to those things to be distinguishable

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over prior art. The Patent Office can require applicant to prove that subject matter shown to be in prior art does not possess a characteristic relied upon where it has reason to believe that a functional limitation asserted to be critical for establishing novelty in claimed subject matter may be an inherent characteristic of prior art; this burden of proof is applicable to product and process claims reasonably considered as possessing allegedly inherent characteristics.

### *Claim Rejections - 35 USC § 103*

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi, as evidenced by the U.S. Patent Application Publication of Liu et al. (2002/0122925; hereinafter "Liu"). The discussion of Claim 1, hereinabove, is incorporated by reference.

14. Nakanishi does not show that the transparent rigid layer and the transparent relaxing layer in the transparent laminate have the particular dynamic storage modulus ( $G'$ ) values, as in Claims 4-7. However, such modulus values are properties which can be easily determined by a person having ordinary skill in the art. As evidenced by Liu, it is well known that materials having a high  $G'$  value do not possess adhesive properties (similar to the transparent rigid layer), while those having lower  $G'$  value have adhesive properties (like the transparent relaxing layer). With regard to the limitation of the  $G'$  values, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The experimental modification of prior art in order to optimize operation conditions fails to render claims patentable in the absence of unexpected results. All of the aforementioned limitations are optimizable as they directly affect the performance of the various layers in the laminate. It would have been obvious to a



person having ordinary skill in the art, at the time of invention, to make the laminate with the limitations of the G' values since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 USPQ 215 (CCPA 1980).

15. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being obvious over Nakanishi, in view of the U.S. Patent Application Publication of Azumi, et al. (2003/0104210; hereinafter "Azumi"). The discussion of Claim 1, hereinabove, is incorporated by reference.

16. The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and

reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

17. Nakanishi teaches the claimed limitations of the transparent laminate for a pen-input image display, as discussed above. However, Nakanishi fails to teach that the transparent relaxing layer is formed from a polymer material including organic lamellar clay minerals, wherein the transparent relaxing layer has a dynamic storage modulus of either  $1 \times 10^3$  to  $1 \times 10^5$  Pa, or not higher than  $6 \times 10^6$  Pa. Azumi, drawn to glass-break preventing film like filter and plasma display apparatus, teaches that a layer with a combination of a composite material of a transparent organic high polymer substance and a lamellar clay mineral, is known for preventing damage to a layer on which the combination layer is disposed. Additionally, Azumi recites that the layer has a dynamic storage modulus of  $6 \times 10^6$  Pa or less. As both the invention of Nakanishi and that of Azumi are drawn to similar fields of invention, it would have been obvious to a person having ordinary skill in the art at the time of invention to have used a transparent relaxing layer made up of a polymer composite material and lamellar clay minerals.

*Conclusion*

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 2001/0037935	11/2001	Oya et al.
US 5,847,795	12/1998	Satoh et al.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Joy whose telephone number is (571) 272-9056.

The examiner can normally be reached on Monday - Friday, 9:00 AM - 5:00 PM EDT.

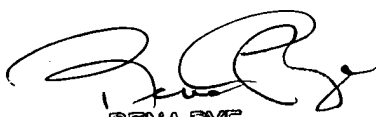
20. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena L. Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

21. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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DJJ  
04/13/2007

  
RENA DYE  
SUPERVISORY PATENT EXAMINER  
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